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WATER SUPPLY OUTLOOK FOR MONTANA

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MAY 22 1967

CURRENT SERIAL RECORDS

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report.

AS OF
APR. 1, 1967

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK
FEDERAL-STATE-PRIVATE COOPERATIVE SNOW SURVEYS

For
MONTANA

Report Prepared

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MONTANA WATER SUPPLY OUTLOOK
April 1, 1967

* * * * *
*
* Near record amounts of high elevation snow accumu-
* lation were measured in the Kootenai, Flathead, *
* Sun, Teton, St. Mary, Gallatin River drainages *
* and in the Castle, Little Belt, Big Belt, Snowy, *
* Absaroka and Beartooth mountains. Other areas *
* have near to above average amounts. Streamflow *
* for the April through September period will be *
* from near average to the largest volume in the *
* past 30 years. *
*
* Late season irrigation supplies will be near aver- *
* age to above average. *
*
* * * * *

West of the Divide the mountain snow pack remains maximum to third highest of record in the higher elevations of the Flathead and Kootenai river drainages. Median elevations are represented by second to fifth highest of record. Low elevation snow is generally near or above average in these drainages. In the Clark Fork and Bitterroot drainages the snow pack is a little above average with near average elevation distribution of the snow pack. Some courses on the east and north edges of the Blackfoot drainage have high snow pack, comparable to that of the Flathead.

East of the Divide the high elevation snow pack is near maximum amounts in the Gallatin, Sun, Teton and St. Mary drainages. Also in the Castle, Little Belt, Belt and Snowy mountains in central Montana and the Absaroka and Beartooth Ranges in the Yellowstone river drainage. Median elevation and low elevation snow is generally above average in all of these areas.

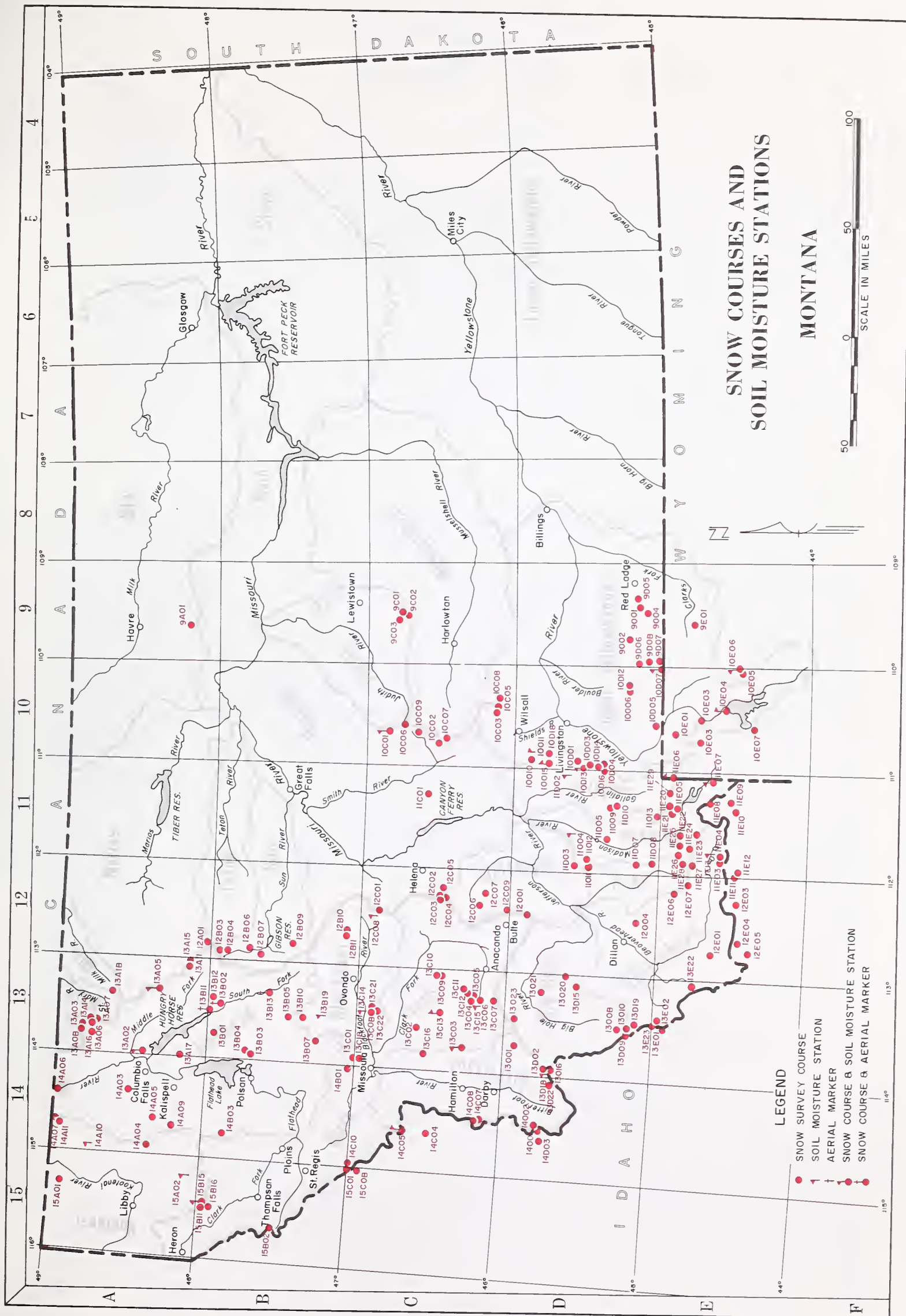
Except for a few isolated spots, the mountain snow is a little above average in the Jefferson and Madison river drainages.

The snow is extremely dense over the entire state for this time of year and will delay high elevation runoff.

April through September streamflow west of the Divide is forecast well above average on Kootenai streams with the flow past the Leona station expected to measure the second highest volume in the past 30 years. The Flathead streams are also forecast to produce their second to third largest volume. Except for the Blackfoot river, which is forecast about 20 percent above average, streams in the Clark Fork and Bitterroot drainages are in the near to 10 percent above average range. Late season irrigation supplies are expected to be near to above average.

The runoff volume from the Gallatin and St. Mary rivers is expected to be the largest of the past 30 years. Other Missouri drainage streams with headwaters in the heavy snow pack areas are forecast to produce second to fifth largest runoff of the past 30 years. Runoff from streams in the Jefferson drainage is expected to be around 10 percent above average. In the Yellowstone river drainage, streams originating in the Absaroka and Beartooth Ranges are forecast at the third to fourth highest volume runoff, while other streams tributary to the Yellowstone will produce above average flow. Late season irrigation supplies are expected to be above average on all streams except for near average on Jefferson river tributaries and Clarks Fork of the Yellowstone.

All irrigation reservoirs are expected to fill. Many of the larger multipurpose reservoirs have below average storage and will be able to absorb much of the runoff.

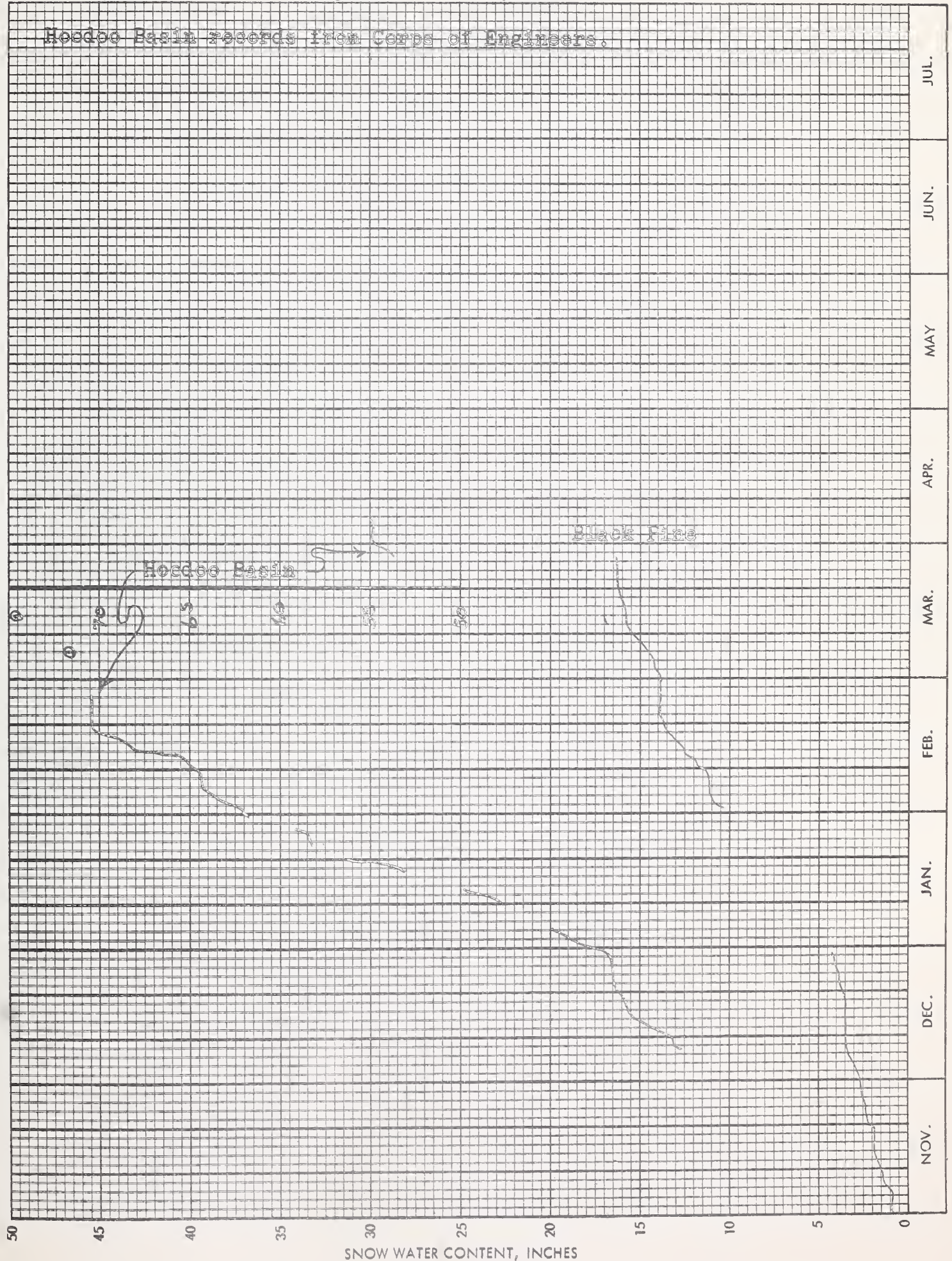


HOODOO BASIN & BLACK PINE SNOW PILLOW DATA

AS OF APRIL 1, 1967

Hoodoo Basin - Sec. 17 T. 14N R. 27W No. 15C08 Drainage: Clark Fork
 Black Pine - 26 8N 15W 13C13
 Hoodoo Basin - Lat. 46-59 Long. 115-02 Elev. 6000
 Black Pine - 46-26 113-26 7000

Hoodoo Basin records from Corps of Engineers.



SNOW WATER CONTENT, INCHES

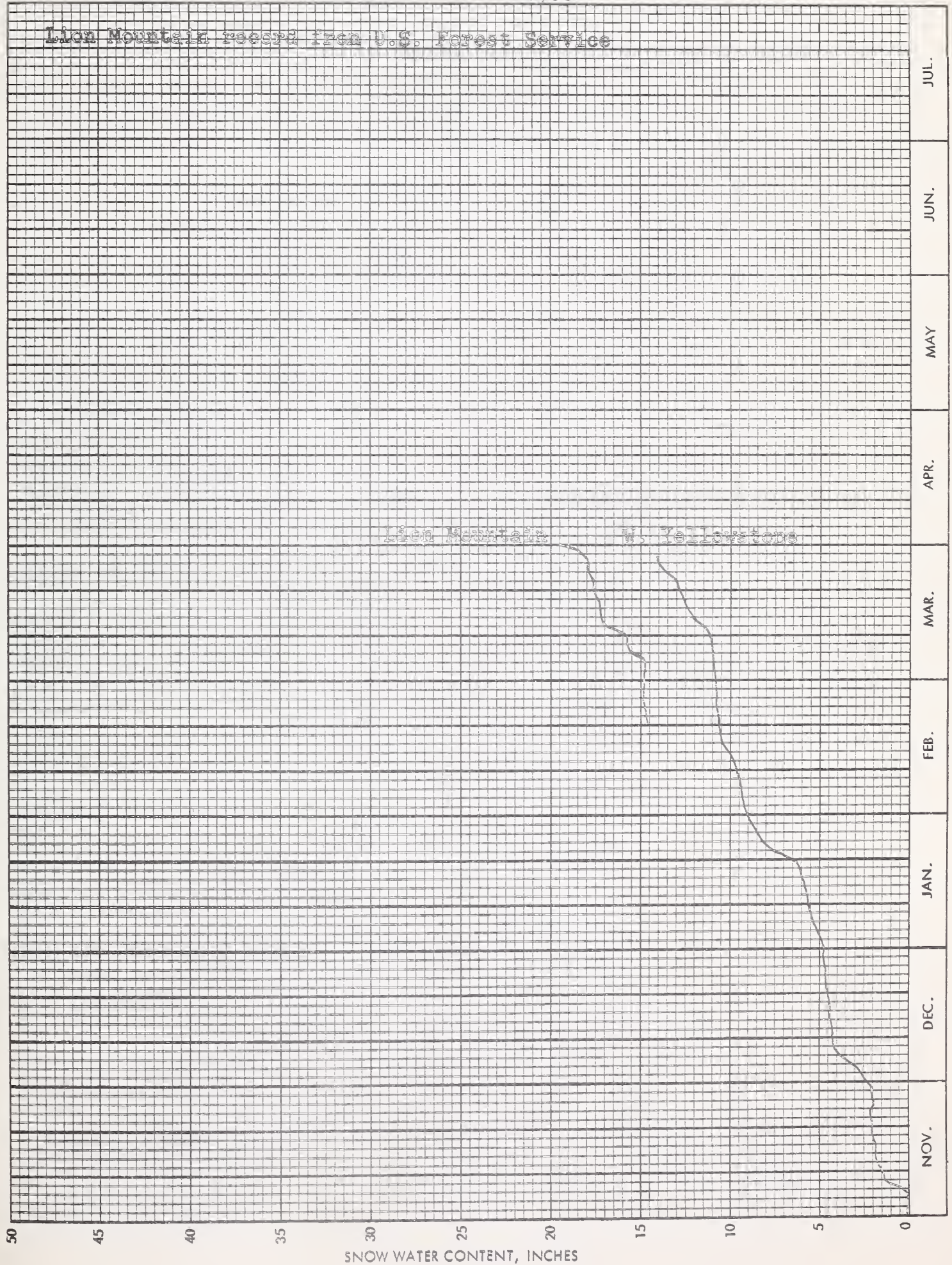


LION MOUNTAIN & W. YELLOWSTONE SNOW PILLOW DATA

AS OF APRIL 1, 1967

Lion Mountain - Sec. 23 T. 11S R. 2W No. 11E28 Drainage: Madison
 Yellowstone - 34 13S 3E 11E07
 Lion Mountain - Lat. 44-52 Long. 111-48 Elev. 8760
 , Yellowstone - 44-40 111-06 6700

Lion Mountain record from U.S. Forest Service



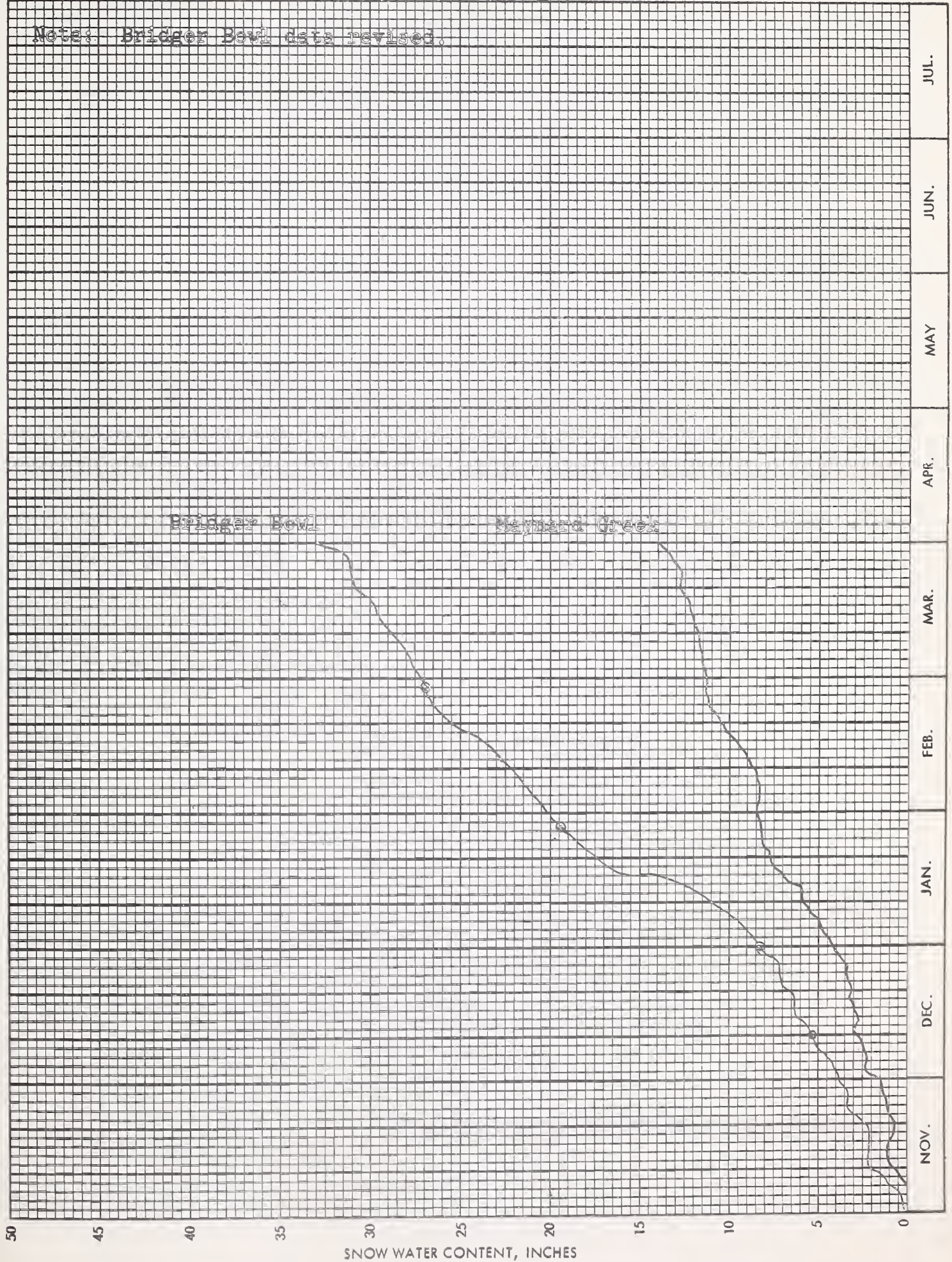
SNOW WATER CONTENT, INCHES

BRIDGER BOWL & MAYNARD CREEK SNOW PILLOW DATA

AS OF APRIL 1, 1967

Bridger Bowl	-	Sec.	<u>25</u>	T.	<u>1N</u>	R.	<u>6E</u>	No.	<u>10D15</u>	Drainage:	<u>Gallatin</u>
Maynard Creek	-		<u>19</u>		<u>1N</u>		<u>7E</u>		<u>10D18</u>		
Bridger Bowl	-	Lat.	<u>45-48</u>			Long.	<u>110-55</u>	Elev.	<u>7250</u>		
Maynard Creek	-		<u>45-49</u>				<u>110-54</u>		<u>6210</u>		

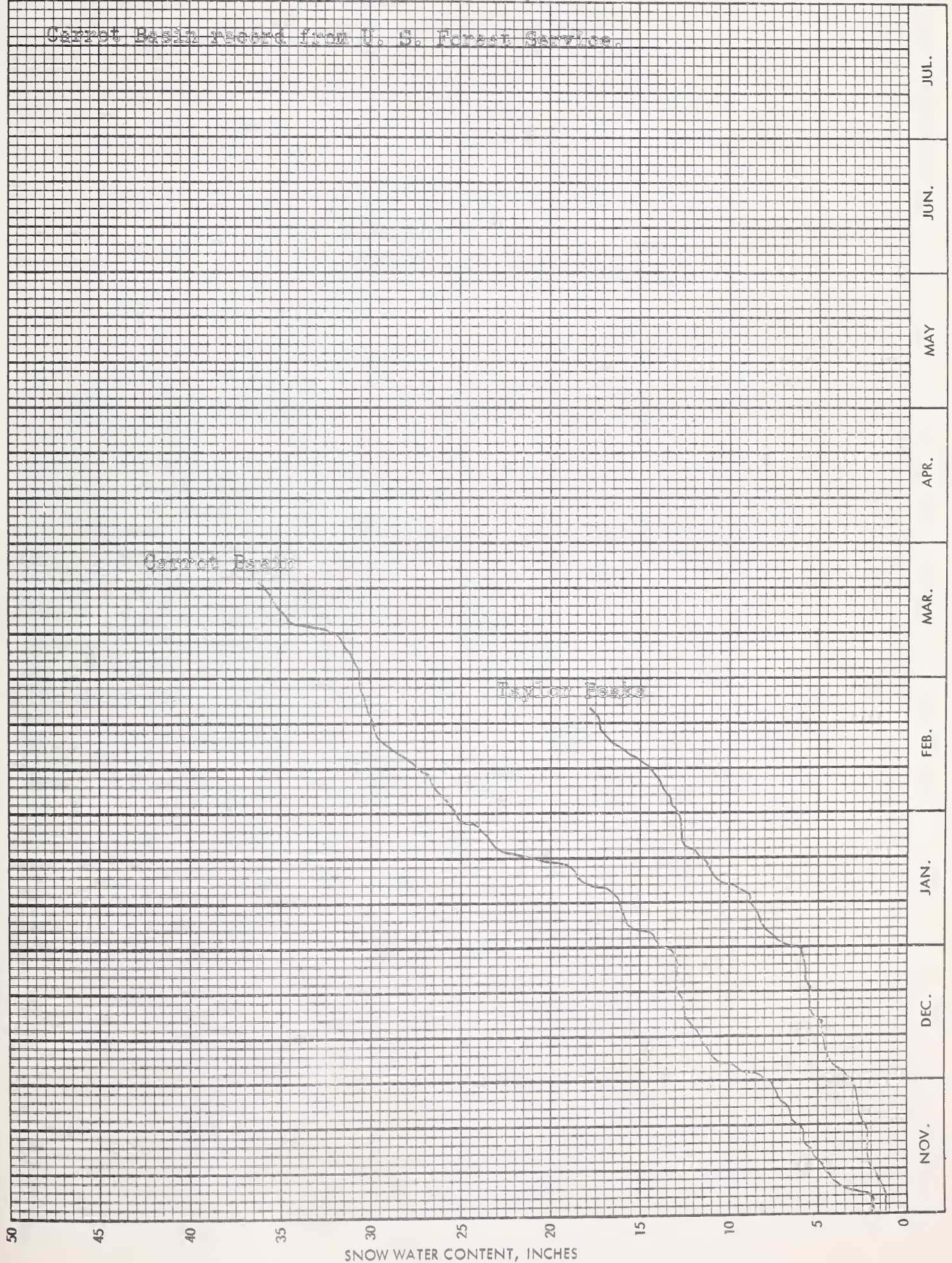
Note: Bridger Bowl data revised.



CARROT BASIN & TAYLOR PEAKS SNOW PILLOW DATA

AS OF APRIL 1, 1967

Carrot Basin	-	Sec.	18	T.	10S	R.	4E	No.	11E29	Drainage:	Gallatin
Taylor Peaks	-		26		9S		2E		11D13		
Carrot Basin	-	Lat.	44-58			Long.	111-58	Elev.	9000		
Taylor Peaks	-		43-01				111-27		8500		

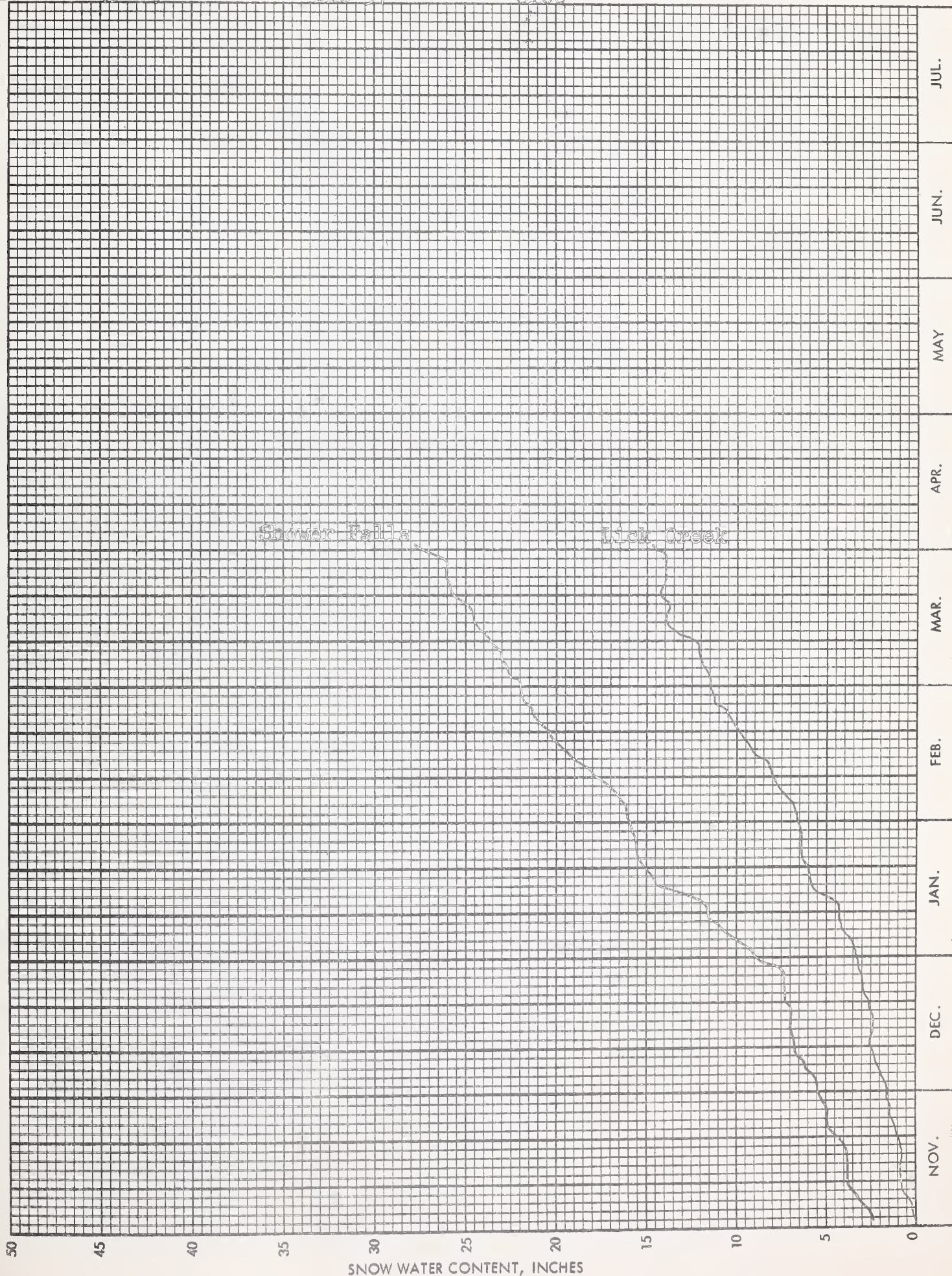




LICK CREEK & SHOWER FALLS SNOW PILLOW DATA

AS OF APRIL 1, 1967

Lick Creek	- Sec.	10	T.	4S	R.	6E	No.	10D13	Drainage:	Gallatin
Shower Falls	-	14		5S		6E		10D16		
Lick Creek	- Lat.	45-30			Long.	110-58	Elev.	6860		
Shower Falls	-	45-24				110-57		8100		

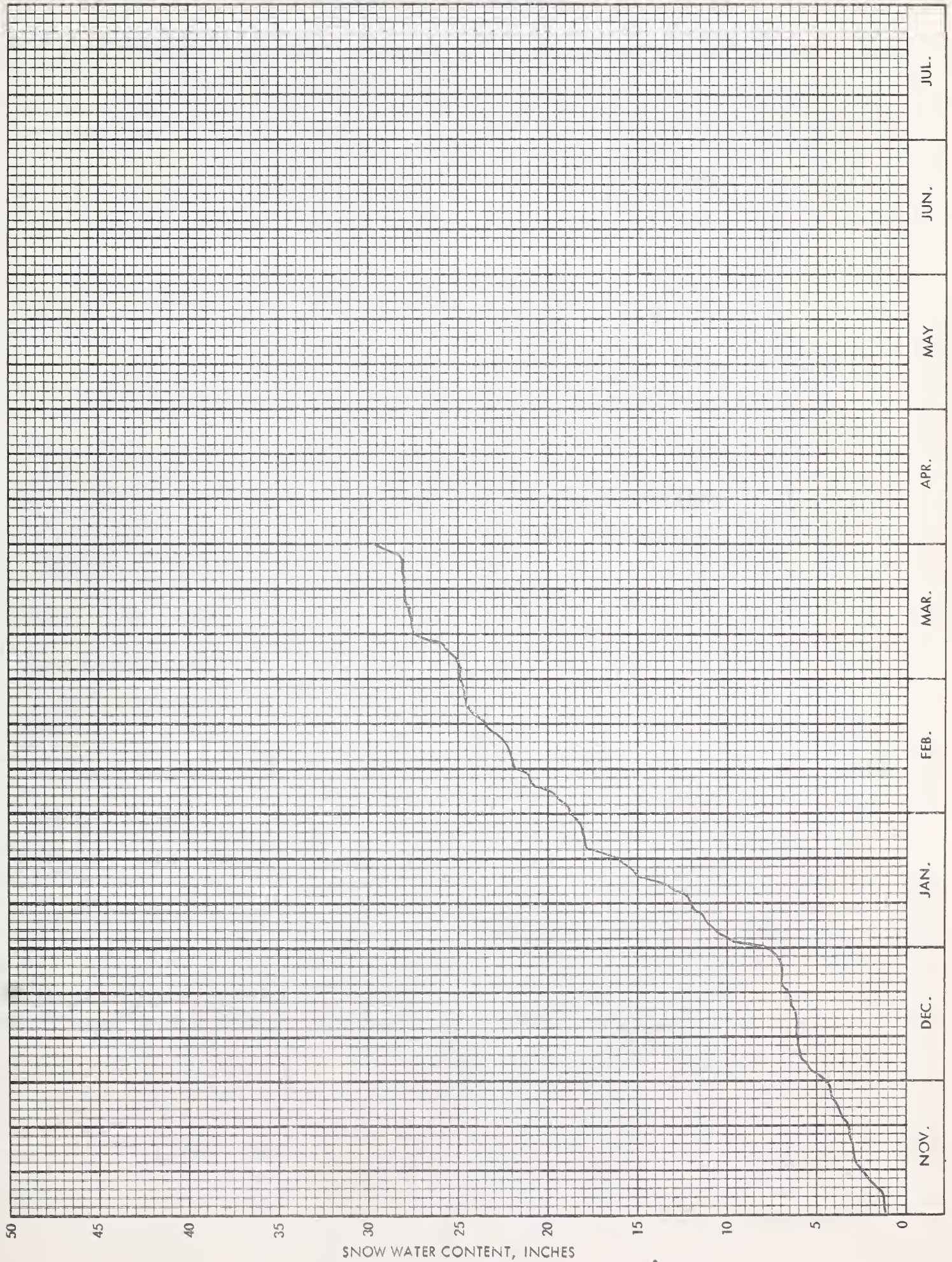


SNOW WATER CONTENT, INCHES

SPUR PARK
SNOW PILLOW DATA

AS OF APRIL 1, 1967

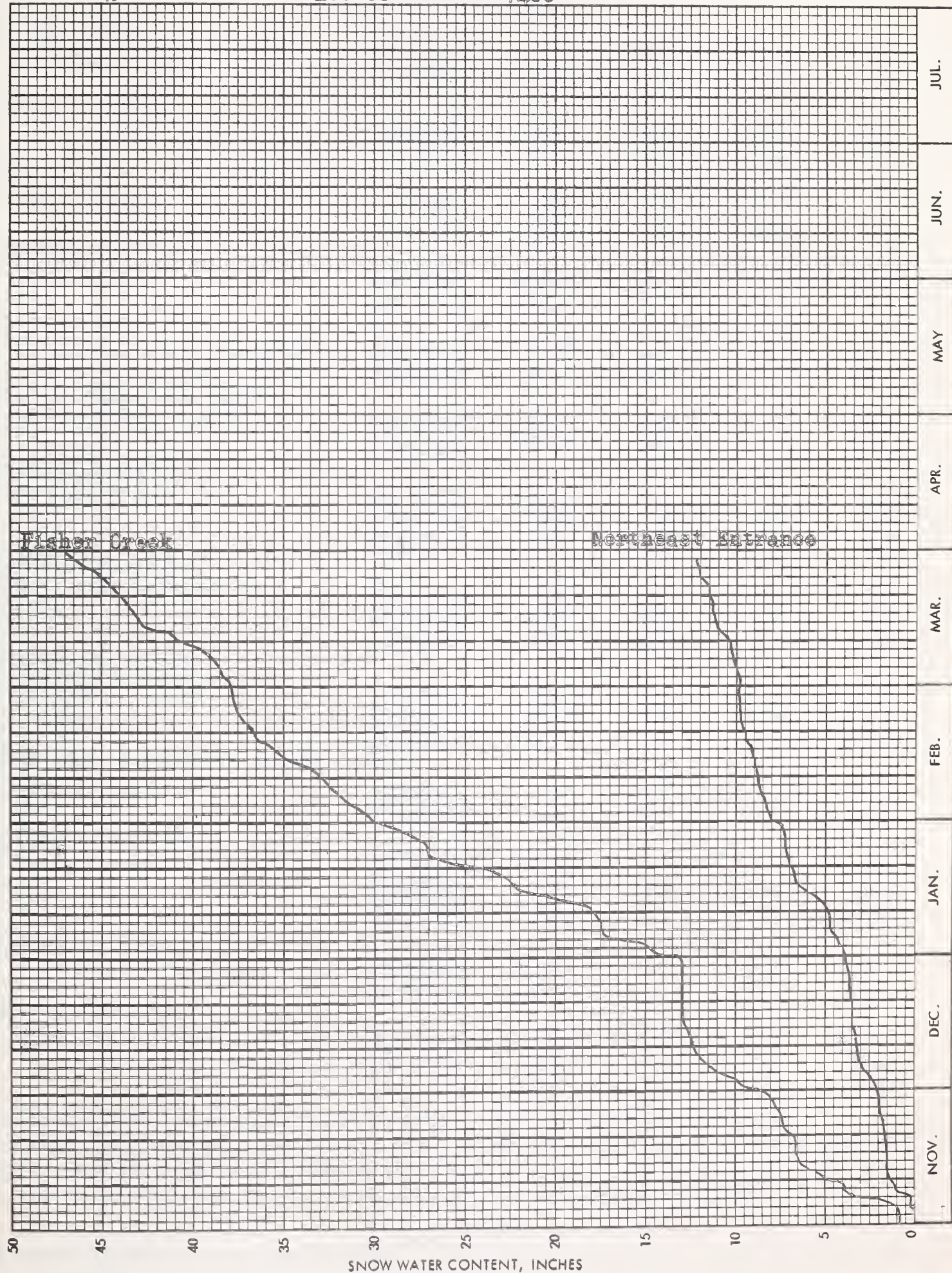
Sec. 20 T. 12N R. 9E No. 10006 Drainage: Judith
Lat. 46-47 Long. 110-37 Elev. 8000



FISHER CREEK & N.E. ENTRANCE SNOW PILLOW DATA

AS OF APRIL 1, 1967

Fisher Creek	-	Sec.	<u>11</u>	T.	<u>9S</u>	R.	<u>14E</u>	No.	<u>9D06</u>	Drainage:	<u>Yellowstone</u>
E. Entrance	-		<u>33</u>		<u>9S</u>		<u>14E</u>		<u>10D07</u>		
Fisher Creek	-	Lat.	<u>45-04</u>			Long.	<u>109-57</u>	Elev.	<u>9100</u>		
E. Entrance	-		<u>45-00</u>				<u>100-00</u>		<u>7400</u>		



WATER SUPPLY FORECASTS

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST	FORECAST	PERCENT	MEASURED FLOW	
		PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE

COLUMBIA RIVER BASIN

FISHER RIVER						
3020	Jennings (near)	Apr-Sept	360	113	247	318
		Apr-July	342	113	234	302
KOOTENAI RIVER						
3030	Libby (at)	Apr-Sept	10300	127	7929	8096
		Apr-July	8900	127	6998	7010
YAAK RIVER						
3045	Troy (near)	Apr-Sept	680	122	564	555
		Apr-July	650	122	545	532
KOOTENAI RIVER						
3050	Leonia (at)	Apr-Sept	11600	124	9176	9327
		Apr-July	10250	125	8156	8179
FLINT CREEK						
3301	Boulder Creek (below)(3)	Apr-Sept	72.8	100	47.3	73.0
		Apr-July	59.0	100	35.8	59.1
MIDDLE FORK ROCK CREEK						
3320	Philipsburg (near)	Apr-Sept	85.0	109	43.8	77.8
		Apr-July	77.0	109	39.2	70.5
BLACKFOOT RIVER						
3400	Bonner (near)	Apr-Sept	1220	118	717	1036
		Apr-July	1100	118	646	938
		Apr-June	960	118	569	812
CLARK FORK RIVER						
3404	Milltown (above)(4)	Apr-Sept	820	102	483	802
		Apr-July	720	102	412	705
		Apr-June	618	102	356	605
CLARK FORK RIVER						
3405	Missoula (above)	Apr-Sept	2040	111	1203	1838
		Apr-July	1820	111	1064	1642
		Apr-June	1578	111	931	1417
WEST FORK BITTERROOT RIVER						
3425	Conner (near)(5)	Apr-Sept	193	108	74	179
		Apr-July	181	108	69	168
BITTERROOT RIVER						
3440	Darby (near)	Apr-Sept	590	101	273	582
		Apr-July	550	101	240	542
		Apr-June	485	101	216	478
BLODGETT CREEK						
3475	Corvallis (near)	Apr-Sept	45.0	101	30.2	44.6
		Apr-July	43.0	101	29.2	42.6
BITTERROOT RIVER						
3528	Missoula (at)(6)	Apr-Sept	1510	97	813	1553
		Apr-July	1410	97	750	1446
		Apr-June	1220	97	677	1253

(3) Sum, Flint Creek at Maxville and Boulder Creek at Maxville.

(4) Difference in observed flow, Clark Fork above Missoula and Blackfoot near Bonner.

(5) Adjusted for storage in Painted Rocks Reservoir.

(6) Difference in observed flow, Clark Fork above and below Missoula.

WATER SUPPLY FORECASTS

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
3530	CLARK FORK RIVER Missoula (below)	Apr-Sept	3550	105	2016	3391
		Apr-July	3235	105	1814	3088
		Apr-June	2798	105	1608	2670
3545	CLARK FORK RIVER St. Regis (at)	Apr-Sept	4700	101	3000	4642
		Apr-July	4275	101	2703	4230
		Apr-June	3710	101	2357	3671
3555	NORTH FORK FLATHEAD RIVER Columbia Falls (near)	Apr-Sept	2570	127	1878	2027
		Apr-July	2340	127	1709	1844
		Apr-June	1990	127	1452	1565
3585	MIDDLE FORK FLATHEAD RIVER West Glacier (near)	Apr-Sept	2300	120	1755	1923
		Apr-July	2140	120	1633	1785
		Apr-June	1830	120	1404	1521
3625	SOUTH FORK FLATHEAD RIVER Columbia Falls (near)(7)	Apr-Sept	2900	122	2004	2381
		Apr-July	2760	122	1910	2262
		Apr-June	2430	122	1708	1988
3630	FLATHEAD RIVER Columbia Falls (at)(7)	Apr-Sept	7960	122	5670	6497
		Apr-July	7360	122	5284	6028
		Apr-June	6370	123	4601	5185
3700	SWAN RIVER Big Fork (near)	Apr-Sept	890	128	594	694
		Apr-July	785	128	526	614
		Apr-June	640	128	431	503
3720	FLATHEAD RIVER Polson (near)(8)	Apr-Sept	9650	124	6841	7778
		Apr-July	8960	124	6399	7229
		Apr-June	7670	124	5519	6188
3890	CLARK FORK RIVER Plains (near)(8)	Apr-Sept	14750	115	9968	12793
		Apr-July	13500	115	9175	11736
		Apr-June	11600	115	7942	10077
3895	THOMPSON RIVER Thompson Falls (near)	Apr-Sept	314	104	212	302
		Apr-July	284	104	186	273
3907	PROSPECT CREEK Thompson Falls (at)	Apr-Sept	173	105	124	165
		Apr-July	163	105	115	155
3920	CLARK FORK RIVER Whitehorse Rapids (at)(9)	Apr-Sept	16500	114	11474	14398
		Apr-July	15000	114	10516	13187
		Apr-June	12850	114	9089	11318

(7) Adjusted for storage in Hungry Horse Reservoir.

(8) Adjusted for storage in Hungry Horse Reservoir and Flathead Lake.

(9) Adjusted for storage in Hungry Horse, Flathead Lake and Noxon Rapids Reservoirs.

WATER SUPPLY FORECASTS

AS OF APRIL 1, 1967

(1000 Acre Feet)

		FORECAST	FORECAST	PERCENT	MEASURED FLOW	
NO.	RIVER AND FORECAST POINT	PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
MISSOURI RIVER BASIN						
0110	RED ROCK RIVER Kennedy Ranch (at)	Apr-Sept Apr-July	90.0 83.0	125 125	50.2 47.6	71.7 66.2
0125	RED ROCK RIVER Monida (near)(11)	Apr-Sept Apr-July	99.0 93.0	126 126	55.1 53.6	78.4 73.7
0195	RUBY RIVER Alder (near)	Apr-Sept Apr-July	98.0 81.7	123 123	60.6 51.4	79.6 66.4
0255	BIG HOLE RIVER Melrose (near)	Apr-Sept Apr-July	780 729	109 109	300 280	718 669
0330	BOULDER RIVER Boulder (near)	Apr-Sept Apr-July	84.0 80.5	110 110	53.2 51.6	76.3 73.0
0345	JEFFERSON RIVER Sappington (at)(12)	Apr-Sept Apr-July	1080 970	111 111	331 304	974 875
0375	MADISON RIVER West Yellowstone (near)	Apr-Sept Apr-July	244 184	117 117	195 145	208 157
0385	MADISON RIVER Grayling (near)(13)	Apr-Sept Apr-July	495 389	118 118	378 287	420 330
0410	MADISON RIVER McAllister (near)(14)	Apr-Sept Apr-July	905 726	126 126	620 477	718 576
0435	GALLATIN RIVER Gateway (near)	Apr-Sept Apr-July	625 533	140 140	389 329	447 381
0485	BRIDGER CREEK Bozeman (near)	Apr-Sept Apr-July	31.0 29.2	156 156	17.6 16.6	19.9 18.7
0500	HYALITE CREEK Bozeman (near)(15)	Apr-Sept Apr-July	50.8 44.0	143 143	37.6 32.5	35.6 30.8
0525	GALLATIN RIVER Logan (at)	Apr-Sept Apr-July	732 622	157 157	320 262	467 396

(11) Adjusted for storage in Lima Reservoir.

(12) Adjusted for storage in Clark Canyon Reservoir.

(13) Adjusted for storage in Hebgen Lake.

(14) Adjusted for storage in Hebgen and Ennis Lakes.

(15) Adjusted for storage in Middle Creek Reservoir.

WATER SUPPLY FORECASTS

AS OF APRIL 1, 1967

NO.	RIVER AND FORECAST POINT	(1000 Acre Feet)				
		FORECAST	FORECAST	PERCENT	MEASURED FLOW	
		PERIOD	THIS YEAR	AVERAGE	LAST YEAR*	AVERAGE
0545	MISSOURI RIVER Toston (at)(16)	Apr-Sept	2600	121	1119	2147
		Apr-July	2250	121	966	1861
0615	PRICKLY PEAR CREEK Clancy (near)	Apr-Sept	25.0	114	15.5	22.0
		Apr-July	21.7	114	13.5	19.2
0770	SHEEP CREEK W. Sulphur Springs (near)	Apr-Sept	29.0	176	19.1	16.5
		Apr-July	25.0	176	16.4	14.2
0786	SUN RIVER Gibson Dam (at)(17)	Apr-Sept	730	120	450	610
		Apr-July	670	120	412	559
0908	MISSOURI RIVER Fort Benton (at)(18)	Apr-Sept	4000	120		3319
		Apr-July	3390	120		2825
0920	TWO MEDICINE CREEK Browning (near)(19)	Apr-Sept	320	118	208	271
		Apr-July	307	118	197	260
0925	BADGER CREEK Browning (near)	Apr-Sept	165	115	107	143
		Apr-July	143	115	91	124
0990	CUT BANK CREEK Cut Bank (at)	Apr-Sept	147	112	89.2	131
		Apr-July	135	112	82.0	120
0995	MARIAS RIVER Shelby (near)(20)	Apr-Sept	730	112	435	651
		Apr-July	690	112	407	617
1095	MISSOURI RIVER Virgelle (at)(21)	Apr-Sept	4840	118		4116
		Apr-July	4200	118		3557
1100	JUDITH RIVER Utica (near)	Apr-Sept	54.0	161		33.5
		Apr-July	50.0	161		31.1
1150	MISSOURI RIVER Zortman (near)(21)	Apr-Sept	5400	118		4508
		Apr-July	4600	118		3878
1155	N. FORK MUSSELSHELL RIVER Delpine (near)	Apr-Sept	8.5	142	4.0	6.0
		Apr-July	7.1	142	3.5	5.0
1185	S. FORK MUSSELSHELL RIVER Martinsdale (above)	Apr-Sept	66.0	135	44.2	48.8
		Apr-July	63.0	135	42.6	46.6

- (16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.
 (17) Adjusted for storage in Gibson Reservoir and diversions.
 (18) Adjusted for storage in Canyon Ferry Reservoir.
 (19) Adjusted for storage in Two Medicine Res. & diversions into Two Medicine Canal.
 (20) Adjusted for storage in Two Medicine, Four Horns, Lake Frances & Swift Res.
 (21) Adjusted for storage in Canyon Ferry and Tiber Reservoirs.



WATER SUPPLY FORECASTS

AS OF APRIL 1, 1967

(1000 Acre Feet)

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	MISSOURI RIVER					
1320	Ft. Peck Dam (below)(22)	Apr-Sept	5150	116		4422
		Apr-July	4500	116		3894
	MILK RIVER					
1350	Eastern Crossing (at)	Apr-Sept	215	86	254	250
	MISSOURI RIVER					
1770	Wolf Point (near)(22)	Apr-Sept	5500	113		4879
		Apr-July	4890	113		4317
	MISSOURI RIVER					
3300	Williston, N.D. (nr.)(29)	Apr-Sept	12300	111		11059
		Apr-July	10300	111		9828

SASKATCHEWAN RIVER BASIN

ST. MARY RIVER						
0175	Babb (near)(30)	Apr-Sept	650	132		491
		Apr-July	560	132		424

- (22) Adjusted for storage in Canyon Ferry, Tiber and Fort Peck Reservoirs.
 (29) Adjusted for storage in Canyon Ferry, Tiber, Fort Peck, Buffalo Bill, Boysen and Yellowtail Reservoirs.
 (30) Adjusted for storage in Lake Sherburne.

WATER SUPPLY FORECASTS

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE

YELLOWSTONE RIVER BASIN

YELLOWSTONE RIVER						
1915	Corwin Springs (at)	Apr-Sept	2200	117	1494	1877
		Apr-July	1840	117	1250	1572
YELLOWSTONE RIVER						
1925	Livingston (near)	Apr-Sept	2550	120	1628	2127
		Apr-July	2120	120	1354	1770
SHIELDS RIVER						
1935	Clyde Park (at)	Apr-Sept	138	139	68.3	99.0
		Apr-July	128	139	65.8	92.2
BOULDER RIVER						
2000	Big Timber (at)	Apr-Sept	445	130	229	343
		Apr-July	416	130	220	321
STILLWATER RIVER						
2050	Absarokee (near) (25)	Apr-Sept	700	127	434	552
		Apr-July	590	127	360	465
CLARKS FORK RIVER						
2075	Chance (at)	Apr-Sept	670	115	431	583
		Apr-July	607	115	389	528
CLARKS FORK RIVER						
2085	Edgar (at)	Apr-Sept	690	114	430	609
		Apr-July	600	114	379	538
ROCK CREEK						
2095	Red Lodge (near)	Apr-Sept	142	138	91.4	103
		Apr-July	110	138	69.1	79.6
YELLOWSTONE RIVER						
2145	Billings (at)	Apr-Sept	4850	124	2938	3913
		Apr-July	4140	124	2516	3362
BIG HORN RIVER						
2870	St. Xavier (near) (26)	Apr-Sept	1430	85	636	1677
		Apr-July	1340	85	584	1568
YELLOWSTONE RIVER						
3090	Miles City (at) (27)	Apr-Sept	6400	110		5778
		Apr-July	5600	110		5080
YELLOWSTONE RIVER						
3295	Sidney (near) (27)	Apr-Sept	6410	110		5850
		Apr-July	5740	110		5230

(25) Adjusted for storage in Mystic Lake.

(26) Adjusted for storage in Buffalo Bill, Boysen, Bull Lake and Yellowtail Reservoirs.

(27) Adjusted for storage in Buffalo Bill, Boysen and Yellowtail Reservoirs.

SNOW SURVEY DATA

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE

COLUMBIA RIVER BASIN

NOTENAI RIVER

5B11	Baree Creek	5500	3/31	148	59.6	45.0	50.5
5B16	Baree Midway	4600	3/31	120	48.0	35.0	-
5B15	Baree Trail	3800	3/31	30	9.4	9.6	-
4A04	Brush Creek	5000	3/29	44	15.0	12.8	14.3*
C 10	Fernie	3500	3/31	35	10.6	8.7	9.5
C 12A	Field	4200	3/31	32	9.9	4.6	5.4
C 11	Glacier	4100	3/30	114	53.4	30.4E	27.6
4A11	Graves Creek	4300	3/28	67	25.3	17.4	-
BC 43	Gray Creek	5100	3/29	79	26.1	20.3	19.7
BC 33	Kicking Horse	5400	3/31	65	21.3	13.6	14.8
BC 20B	Kimberley	3800	3/31	27	8.9	6.9	7.7
BC 32	Marble Canyon	5000	3/29	57	18.7	13.1	13.8
BC 10B	Morrissey Ridge	6100	3/31	107	37.5	-	-
BC 10A	New Fernie	4100	3/31	68	23.0	16.1	15.4*
15A01	Red Mountain	6000	3/27	74	27.1	20.0	21.4
BC 8A	Sinclair Pass	4500	3/29	33	9.4	5.3	5.4
BC 20A	Sullivan Mine	5100	3/30	61	20.4	13.7	15.6
BC 41	Upper Elk River	4400	3/27	29	9.5	6.5	8.2
14A07	Weasel Divide	5450	3/28	124	53.0	31.2	34.1

FLATHEAD RIVER

14B03	Bassoo Peak	5150	3/27	38	13.1	13.2	13.4*
13A11	Beaver Lake	5900	4/2	78	31.1	21.6	-
13B03	Big Creek	6750	3/29	134	55.2	37.0	46.4
13A17	Camp Misery	6400	3/31	161	64.2	40.6	43.0*
13A02	Desert Mountain	5600	3/30	61	20.9	14.8	16.9
13B04	Fatty Creek	5500	3/29	84	31.0	20.3	21.7*
14A09	Griffin Creek Divide	5150	3/28	45	15.8	9.9	14.3*
13B12	Gunsight Lake	6300	4/2	135	54.4	38.9	-
14A03	Hell Roaring Divide	5770	3/31	110	45.7	29.2	32.3
13B13	Holbrook	4530	4/3	37	14.8	10.6	10.4*
14A06	Kishenehn	3890	3/30	35	10.9	7.6	10.4
14A05	Logan Creek	4300	3/29	33	9.7	6.8	9.5
13A05	Marias Pass	5250	3/29	68	24.3	18.3	20.1
13A16	Mineral Creek	4000	3/30	75	25.4	18.1	22.9
13B07	North Fork Jocko	6330	3/30	152	58.2	36.6	46.7
13B02	Spotted Bear Mountain	7000	4/3	57	22.3	13.4	15.5
13B01	Trinkus Lake	6100	4/3	139	59.6	39.4	44.2*
13B11	Twin Creeks	3580	4/3	40	16.2	12.8	12.1*
13B05	Upper Holland Lake	7000	4/3	114	47.4	31.0	36.3*

E - Estimated

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SNOW SURVEY DATA

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE
LARK FORK RIVER							
13C13	Black Pine	7100	3/28	47	16.8	10.5	14.6*
13C13	Black Pine Pillow	7100	3/28	SP	16.4	10.9	-
13B10	Copper Creek	5700	3/31	58	22.8	13.2	-
13B11	Cotter Mine	6250	3/31	66	26.0	15.5	-
13B10	Coyote Hill	4200	3/30	37	12.8	5.9	11.0
13C09	El Dorado Mine	7800	3/31	81	23.6	15.4	22.6*
13C11	Fred Burr Pass	8000	3/28	79	30.0	18.2	29.0*
13C10	Gold Creek Lake	7200	3/31	59	18.8	12.4	17.0*
14C10	Heart Lake Trail	4800	3/27	75	28.0	23.4	-
15C10	Hoodoo Basin	6000	3/27	147	56.9	-	-
15C10	Hoodoo Basin Pillow	6000	4/1	SP	54.8	-	-
15C01	Hoodoo Creek	5900	3/27	141	53.4	42.6	53.4
13C04	Intergaard	6450	3/31	38	11.8	5.6	8.5*
15B02	Lookout	5250	3/30	114	40.8	34.3	40.5
13C21	Lubrecht Forest No. 3	5450	3/29	29	7.4	5.0	8.2*
13C22	Lubrecht Forest No. 4	4650	3/29	11	2.8	0.8	3.5*
13C08	Lubrecht Forest No. 6	4040	3/29	8	2.3	0.6	3.5*
13C12	Red Lion	7100	3/28	52	18.2	11.4	17.5*
13C03	Skalkaho Summit	7260	3/30	82	30.8	20.4	27.4
13C02	Slide Rock Mountain	7100	3/29	49	16.8	13.2	16.0
13C05	Southern Cross	6500	3/31	33	10.5	4.8	7.0*
13C18	Spring Gulch	6000	3/27	38	12.9	8.7	12.5*
13C07	Storm Lake	7780	3/27	48	15.5	9.8	15.5
13C06	Stuart Mill	6500	3/31	32	10.2	4.7	7.5*
13C01	Stuart Mountain	7400	3/27	88	35.4	28.0	32.6
14B01	TV Mountain	6800	3/26	59	20.6	17.0	18.7*

BITTERROOT RIVER

13C16	Ambrose	6480	3/26	47	15.4	12.8	14.3*
13D01	East Fork R. S.	5400	3/26	24	7.0	5.4	7.7
13D02	Gibbons Pass	7100	3/28	64	26.2	15.4	25.0
14D03	Kit Carson	5020	3/31	30	10.6	6.6	9.0
14C05	Lolo Pass	5230	3/27	94	37.8	27.5	36.4*
14C07	Lost Horse	5940	3/28	93	34.5	22.8	35.6*
13D16	Moose Creek	6200	3/31	50	18.4	10.4	17.1
14D02	Nez Perce Camp	5680	3/31	49	17.4	10.5	15.8
14D01	Nez Perce Pass	6570	3/31	52	19.4	13.1	18.3
13D22	Saddle Mountain	7940	3/30	80	28.4	18.4	-
14C04	Savage Pass	6600	3/27	85	32.0	25.9	30.5*
14C08	Twin Lakes	6510	3/28	119	46.3	30.8	46.7*

SP - Snow pillow observation - water content only.

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SNOW SURVEY DATA

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE

MISSOURI RIVER BASIN

LAVERHEAD RIVER

1D10	Bloody Dick	7600	3/31	41	12.4	7.2	11.7
1E11	Blue Ledge Mine	6700	4/1	63	23.0	11.7	16.7
1E03	Camp Creek	6800	3/31	40	12.0	6.7	10.4
1D04	Carter Creek	7400	3/31	42	9.4	4.2	-
1E22	Dad Creek Lake	8400	3/30	61	17.4	10.3	-
1D15	Elk Horn Springs	7800	3/28	34	10.0	6.6	10.4
1D09	Gold Stone	8100	3/31	51	16.6	10.1	15.3
1E12	Kilgore	6200	4/1	34	11.1	6.8	10.0
1E04	Lakeview Canyon	6930	3/30	56	17.5	9.8	10.8
1E03	Lakeview Ridge	7400	3/30	56	16.7	8.4	9.7
1E01	Lemhi Pass	7480	3/30	36	9.4	5.6	9.2
1E23	Lemhi Ridge	8100	3/30	37	10.0	-	-
1E02	Trail Creek	7090	3/30	36	9.3	5.6	8.8
1E01	White Pine Ridge	8850	3/30	32	5.2	2.3	5.9

RUBY RIVER

1D08	Clover Meadow	8600	3/31	77	21.7	12.9	-
1E07	Divide	7900	3/31	49	13.1	7.6	-
1E06	Notch	8500	3/31	67	18.7	12.7	-

BIG HOLE RIVER

1D20	Abundance Lake	8800	3/28	59	21.2	14.1	-
1D19	Darkhorse Lake	8600	3/30	77	31.0	18.6	-
1D21	Foolhen	8280	3/28	61	21.5	10.9	-
1D08	Jahnke Creek	7340	3/31	37	10.8	5.2	11.2

JEFFERSON RIVER

1D07	Berry Meadow	7300	3/27	33	10.2	5.8	7.8*
1D09	Copper Mountain	7700	3/30	47	13.4	9.0	-
1D10	Nez Perce Creek	6500	3/30	30	8.7	-	-
1D06	Picnic Grounds	6500	3/31	23	6.1	2.4	4.8*
1D01	Pipestone Pass	7200	3/28	25	7.0	4.6	6.2

MADISON RIVER

1E09	Big Springs	6500	3/29	74	26.7	16.8	22.6
1D07	Call Road	8050	3/31	54	14.7	8.4	-
1D12	Four Mile	6900	3/29	39	8.9	5.8	-
1E25	Freezeout Lake	7200	3/22	39	10.8	7.1	-
1E26	Freezeout Mountain	8250	3/22	64	20.4	14.2	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SNOW SURVEY DATA

AS OF APRIL 1, 1967

(inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE
WADISON RIVER (continued)							
11E05	Hebgen Dam	6550	3/28	39	13.3	7.2	12.2
11E10	Island Park	6315	3/29	56	19.6	11.5	17.6
11D05	Jack Creek	7500	3/28	25	7.8	4.0	6.9*
11E22	Lake Creek	6100	3/23	31	9.8	6.2	-
11E28	Lion Mountain Pillow	8760	3/30	SP	19.8	-	-
11D11	Lower Twin	7900	3/29	71	21.2	16.2	-
11E23	Meridian Creek	7000	3/22	38	10.8	6.5	-
11E02	Norris Basin	7500	4/1	47	13.6	6.9	9.9*
11D03	North Meadow	7500	3/29	40	9.0	6.2	9.4*
11E21	Potomageton Park	7150	3/31	59	21.0	11.4	-
11E20	Sentinel Creek	8300	3/31	90	32.1	18.2	-
11E24	Tepee Creek	8000	3/23	56	17.2	10.0	-
11E27	Upper West Fork	8750	3/30	68	19.1	14.4	-
11E08	Valley View	6500	3/29	69	25.2	13.0	16.4
11E07	West Yellowstone	6700	3/28	53	17.0	7.9	11.7
11E07	West Yellowstone Pillow	6700	3/28	SP	14.2	-	-

GALLATIN RIVER

10D14	Arch Falls	7350	3/30	53	16.8	9.3	12.1*
11D09	Bear Basin	8150	3/29	79	25.1	14.3	20.4*
10D15	Bridger Bowl Pillow	7250	3/31	SP	32.8	21.8	-
11E29	Carrot Basin Pillow	9000	3/22	SP	36.3	-	-
10D04	Devil's Slide	8100	3/30	83	26.8	16.4	22.3
10D03	Hood Meadow	6600	3/30	46	13.4	6.2	10.0
10D13	Lick Creek Pillow	6860	3/24	SP	14.1	7.0	-
11D10	Little Park	7400	3/29	63	19.4	10.7	14.8*
10D18	Maynard Creek Pillow	6210	3/31	SP	14.4	-	-
10D01	New World	6700	4/3	44	16.2	9.0	10.8
10D16	Shower Falls Pillow	8100	3/30	SP	27.4	20.3	-
11D13	Taylor Peaks Pillow	8500	No report				
11E06	Twenty-One Mile	7150	3/27	66	24.5	13.9	18.2

MISSOURI RIVER (Main Stem)

11C01	Boulder Mountain	7950	3/28	62	21.1	14.7	15.5*
12C05	Chessman Reservoir	6200	3/29	20	5.6	1.2	4.9
10C09	Deadman Creek	6450	3/31	50	16.8	7.0	-
10C07	Elk Peak	8000	3/29	68	22.2	13.7	15.8*
10C02	Grasshopper	7000	3/30	34	7.8	3.5	5.7
10C01	Kings Hill	7500	3/27	59	19.4	10.1	13.6
9A01	Rocky Boy	5200	4/1	31	8.1	3.3	4.3
12C01	Stemple Pass	6600	3/30	47	15.4	8.3	11.0
12C02	Ten Mile Lower	6600	3/29	32	10.2	3.4	7.2
13C03	Ten Mile Middle	6800	3/28	40	13.3	7.0	11.2
12C04	Ten Mile Upper	8000	3/28	45	15.1	9.3	14.3

SP - Snow pillow observation - water content only.

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SNOW SURVEY DATA

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE
<u>DN-TETON-MARIAS RIVERS</u>							
2A15	Badger Pass	6900	4/2	111	43.3	34.2	-
2B06	Cabin Creek	5200	4/2	36	14.4	7.4	7.0*
2B09	Five-Bull	5700	4/2	32	12.1	6.3	7.1*
2A01	Freight Creek	6000	4/2	57	23.3	15.4	17.0
2B07	Goat Mountain	7000	3/31	47	15.6	9.1	12.3
2B04	Wrong Creek	5700	4/2	52	21.6	15.6	15.8*
2B03	Wrong Ridge	6800	4/2	67	28.4	19.9	22.2*

JUDITH RIVER

9C02	Avalanche	7100	4/5	84	30.9	16.3	-
9C01	Crystal Lake	6100	3/31	56	19.1	7.2	12.2
9C03	Rock Creek	5600	3/31	43	12.3	5.1	-
10C06	Spur Park	8000	3/31	89	31.3	16.4	19.2*
10C06	Spur Park Pillow	8000	3/31	SP	29.9	-	-

SASKATCHEWAN (Bow River)

ALB. 1	Bow River	5100	3/30	53	17.2	8.4	9.2
ALB. 2	North Course	5400	3/30	52	17.1	7.6	9.1
ALB. 5	Lake Louise	5800	3/29	57	18.2	10.3	10.9
ALB. 6	Mirror Lake	6600	3/29	63	21.2	10.8	13.1
ALB. 8	Misc. Lake Louise	5700	3/29	56	18.8	8.9	11.7
ALB. 10	Mount Eisenhower	5000	3/28	32	8.2	5.0	-

ST. MARY RIVER

13A18	Hudson Bay Divide	5800	3/29	65	23.6	15.9	-
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SP - Snow pillow observation - water content only.

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SNOW SURVEY DATA

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
						LAST YEAR	AVERAGE
UPPER YELLOWSTONE RIVER							
XC05	Bald Ridge	7500	3/28	46	15.6	10.0	11.7*
XD01	Camp Senia	7890	4/3	34	10.1	4.4	6.3
XE03	Canyon	7750	3/30	63	21.7	13.0	16.3
XD07	Cooke Station	8150	3/31	77	26.7	13.3	-
XD05	Crevice Mountain	8400	3/30	44	14.1	6.2	9.5
XE06	East Entrance	7000	3/31	30	10.0	5.0	11.3*
XD06	Fisher Creek	9100	3/31	133	51.4	33.6	-
XD06	Fisher Creek Pillow	9100	3/31	SP	47.7	-	-
XD05	Grizzly Peak	8400	3/30	62	20.3	12.0	15.7*
XD06	Independence	8000	3/24	69	24.9	13.1	19.2*
XE04	Lake Camp	7850	3/29	45	14.0	6.2	11.1
XE01	Lodgepole	8200	3/31	46	15.0	7.3	11.8*
XE01	Lupine Creek	7300	3/28	49	15.2	7.8	11.2
XD12	Monument Peak	9000	3/24	94	33.8	19.3	23.0*
XD07	Northeast Entrance	7400	4/3	37	14.0	4.6	9.3
XD07	Northeast Entrance Pillow	7350	3/29	SP	12.2	-	-
XC03	Porcupine R.S.	6500	3/28	31	9.4	6.3	7.7
XD10	Sacajawea	6550	3/31	55	17.2	11.8	13.0*
XC08	South Fork Shields	8100	3/28	80	29.6	21.2	-
XE05	Sylvan Pass	7100	3/31	49	15.0	10.0	14.9
XE07	Thumb Divide	7900	3/30	76	26.8	21.1	24.2
XD04	Timberline Creek	8850	4/3	59	23.0	11.4	14.1*
XD02	West Rosebud	7500	3/31	49	20.8	-	-
XD08	White Mill	8700	3/31	102	36.6	-	-

SP - Snow pillow observation - water content only.

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE

COLUMBIA RIVER BASIN

Kootenai

15B15M	Baree Trail	3800	48	7.5	3/31	5.2	7.6	-
14A10M	Murphy Lake R.S.	3000	48	22.6	4/2	21.9	22.2	-
15A02M	Raven R.S.	3050	48	23.0	4/3	22.2	22.2	-

Flathead

13A02M	Desert Mountain	5600	54	8.4	3/31	8.2	7.4	7.4
13A05M	Marias Pass	5250	54	6.5	3/31	5.5	5.8	5.5

Clark Fork

13C13M	Black Pine	7100	48	10.0	3/28	7.9	5.9	-
13C15M	Georgetown Lake	6450	48	9.0	3/27	5.1	3.6	3.5
13B19M	Seeley Lake R.S.	4030	48	11.9	4/4	10.4	12.4	8.5
13C03M	Skalkaho Summit	7260	48	10.8	3/30	9.9	10.0	-

Bitterroot

13D18M	Gibbons Pass	7100	48	7.1	3/26	4.8	5.0	5.4
14C05M	Lolo Pass	5250	48	10.6	3/27	4.0	6.2	6.2

MISSOURI RIVER BASIN

Beaverhead

11E13M	Lakeview	6700	48	15.3	4/5	6.7	6.4	9.3
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Madison

10D04M	Red Bluff	4800	40	4.7	4/1	2.4	2.3	2.4
11E07M	West Yellowstone	6700	48	6.5	3/28	2.6	-	-

Gallatin

10D15M	Bridger Bowl	7250	48	15.8	3/31	15.2	16.7	-
11D02M	College Site	4856	54	14.5	3/31	14.6	13.8	11.4
10D13M	Lick Creek	6860	48	18.8	3/27	19.1	14.8	-
11E06M	Twenty-One Mile	7150	48	10.0	3/28	2.8	3.0	2.8

Missouri Main Stem

10C01M	Kings Hill	7420	48	11.8	3/31	4.8	8.8	8.2
12C08M	Stemple Pass	6230	48	5.9	3/31	4.0	5.2	4.7

Yellowstone

10D11M	Battle Ridge	6020	48	17.6	3/31	15.2	14.8	13.6
10D07M	Northeast Entrance	7350	48	9.4	4/4	4.9	7.4	7.0

**AVERAGE FOR PERIOD OF RECORD

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

			USEABLE STORAGE			
BASIN	RESERVOIR	USEABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE	
COLUMBIA RIVER BASIN						
Flathead	Hungry Horse	3,428.0	1,551.0	2,214.0	2,244.4**	
	Flathead Lake	1,791.0	731.3	650.4	690.8	
	Camas (Sum of 4)	45.2	27.1	31.0	33.8	
	Mission Valley (Sum of 8)	100.3	26.4	63.6	37.2	
Clark Fork	Georgetown Lake	31.0	19.3	24.0	21.8	
	Noxon Rapids	334.6	158.9	189.0	-	
Bitterroot	Como	34.9	11.8	16.2	13.4	
	Painted Rocks	31.7	15.2	14.5	14.1**	
MISSOURI RIVER BASIN						
Beaverhead	Clark Canyon	328.9	115.0	156.3	-	
	Lima	84.0	14.0	47.3	27.3	
Ruby	Ruby	38.8		-	26.1**	
Madison	Hebgen Lake	377.5	195.1	222.3	179.1	
	Ennis Lake	41.0	39.4	39.2	36.4	
Gallatin	Middle Creek	8.0	3.5	2.4	3.9**	
Missouri	Canyon Ferry	2,043.0	1,028.0	1,506.0	1,529.0**	
	Hauser & Helena	61.9	61.3	60.7	44.6	
	Lake Helena	10.4	10.2	10.0	5.6	
	Holter Lake	81.9	80.6	80.0	51.7	
	Smith River	10.7	6.0	9.4	6.5**	
	Ackley Lake	5.8		-	3.5	
	Durand	7.0	4.2	6.1	4.9	
	Martinsdale	23.1	7.4	12.4	8.7	
	Deadman's Basin	72.2	45.8	68.8	41.6**	
	Fort Peck	19,410.0	15,700.0	16,830.0	10,875.4	
	Sun	Gibson	105.0	24.3	52.6	60.6
		Willow Creek	32.3	16.6	25.2	21.0
		Pishkun	32.0	15.8	18.8	18.2
	Marias	Lower Two Medicine			-	0.0
		Four Horns	19.2	11.6	12.0	10.6
Swift				-	23.9	
Lake Frances		112.0	72.1	93.7	92.8	
Milk	Tiber	1,347.0	466.4	724.7	647.4**	
	Fresno	127.2	134.9	119.9	81.5	
	Nelson	66.8	49.8	47.9	34.9	
Yellowstone	Lake Sherburne	66.1	21.4	15.4	24.4	
	Mystic Lake	20.8	4.4	6.6	4.8	
	Tongue River	68.0	42.7	43.4	20.7	
Big Horn	Cooney	27.5	14.5	22.0	13.5**	
	Yellowtail	1,356.0	698.1	305.8	-	

Agencies Cooperating in Collecting Data Contained in this Bulletin

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Region 1, Missoula, Montana

U. S. Geological Survey
Helena, Montana

U. S. Army Corps of Engineers
Portland, Oregon
Seattle, Washington
Omaha, Nebraska

U. S. Indian Irrigation Service
St. Ignatius, Montana

U. S. Weather Bureau
Helena, Montana

U. S. Bureau of Sports Fisheries
and Wildlife
Red Rock Lakes Refuge
Monida, Montana

U. S. Bureau of Reclamation
Billings, Montana
Boise, Idaho

U. S. Soil Conservation Service
Montana, Wyoming, Idaho

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Montana Counties

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Yellowstone National Park
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State Water Conservation Board
Helena, Montana

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Agricultural Experiment Station
Havre, Montana

Montana State University
Agricultural Experiment Station
Bozeman, Montana

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School of Forestry
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Water Rights Branch, Dept. of
Lands and Forests
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